Article

Composition of Essential Oil Compounds from Different Syrian Populations of Origanum syriacum L. (Lamiaceae)

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Abstract

The chemical compositions of the essential oil compounds of 117 individual plants belonging to 11 Syrian populations of Origanum syriacum L. (Lamiaceae) were studied by GC-FID and GC-MS. The composition was dominated by carvacrol and/or thymol with a high degree of polymorphism in the occurrence of these two compounds between the different populations. In three populations carvacrol was dominating, with thymol being present only in minor amounts, whereas in only one population thymol was the main compound, with carvacrol only in traces. In all other populations both carvacrol and thymol were present as major compounds. No geographical pattern could be detected for the occurrence of the chemotypes. Thymoquinone, a promising anticancer candidate, was present in the extracts in a wide range between 0.04 and 23.7%.

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